

Fact Sheet



For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This facility is slated to be retired and decommissioned by Appalachian Power Company. Due to an ongoing review by the Public Service Commission of West Virginia and the uncertainty of the outcome and date of said outcome, the retirement and decommissioning has been delayed. Also, in light of a Memorandum of Understanding (MOU) between the WV Division of Air Quality and the US Environmental Protection Agency, this Title V Renewal Permit is being processed in order to meet the milestones of that MOU.

Permit Number: **R30-05300001-2015**

Application Received: **November 8, 2013**

Plant Identification Number: **053-00001**

Permittee: **Appalachian Power Company (d.b.a. American Electric Power)**

Facility Name: **Philip Sporn Plant**

Mailing Address: **1 Riverside Plaza, Columbus, OH 43215**

Revised: NA

Physical Location:	New Haven, Mason County, West Virginia
UTM Coordinates:	420.01 km Easting • 4313.31 km Northing • Zone 17
Directions:	Facility is located on State Route 62, 1-1/2 mile east of New Haven, West Virginia.

Facility Description

The Philip Sporn Plant is a fossil fuel fired electric generation facility and operates under Standard Industrial Classification Code (SIC) 4911. The facility consists of a four (4) steam generators (i.e., Units 1, 2, 3, and 4 each rated @ 1311 mmBtu/hr) that provide a steam supply to turbine driven electrical generators. The facility also includes various supporting operations including but not limited to coal handling, ash handling, a wastewater treatment system and various tanks with insignificant emissions. The facility has the potential to operate seven (7) days per week, twenty-four (24) hours per day and fifty-two (52) weeks per year.

The Philip Sporn Plant is not currently in operation and was shut-down prior to June 1, 2015. Appalachian Power Company has plans to permanently retire and decommission Units 1, 2, 3, and 4. The permanent retirement and decommissioning of the units has been delayed due to a request made by the Public Service Commission of West Virginia through an order issued by the Commission (Case No. 15-0722-E-P) on July 7, 2015.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2013 Actual Emissions
Carbon Monoxide (CO)	2,013.7	88.6
Nitrogen Oxides (NO _x)	25,130.7	1,455.3
Particulate Matter (PM _{2.5})	126.71	28.1
Particulate Matter (PM ₁₀)	1,261.71	88.9
Total Particulate Matter (TSP)	1,636.17	163.4
Sulfur Dioxide (SO ₂)	73,499.9	9,031.4
Volatile Organic Compounds (VOC)	241.6	15.1

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2013 Actual Emissions
Hydrogen Chloride	5,343.5	450.6
Hydrogen Fluoride	464.0	30.7
Selenium	21.0	0.8
Other Miscellaneous HAPs	12.5	0.2

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

Due to this facility's potential to emit over 100 tons per year of criteria pollutants (i.e., SO₂, NO_x, PM₁₀, CO and VOC), over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Philip Sporn Plant is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:

45CSR2

To Prevent And Control Particulate Air Pollution From
Combustion Of Fuel In Indirect Heat Exchangers
Control Of Air Pollution From Combustion Of Refuse

45CSR6

45CSR10	To Prevent And Control Air Pollution From The Emission Of Sulfur Oxides
45CSR11	Prevention Of Air Pollution Emergency Episodes
45CSR30	Requirements For Operating Permits
45CSR33	Acid Rain Provisions and Permits
45CSR34	Emission Standards For Hazardous Air Pollutants
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
40 C.F.R. Part 61, Subpart M	National Emission Standard For Asbestos
40 CFR Part 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units
40 CFR 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 C.F.R. Part 64	Compliance Assurance Monitoring
40 C.F.R. Part 72	Permits Regulation
40 C.F.R. Part 73	Sulfur Dioxide Allowance System Permits Regulation
40 C.F.R. Part 74	Sulfur Dioxide Opt-ins
40 C.F.R. Part 75	Continuous Emissions Monitoring
40 C.F.R. Part 76	Acid Rain Nitrogen Oxides Emission Reduction Program
40 C.F.R. Part 77	Excess Emissions
40 C.F.R. Part 78	Appeals Procedure (for Acid Rain Program)
40 C.F.R. Part 82, Subpart F	Ozone depleting substances
40 C.F.R. Part 97, Subpart AAAAA	TR NO _x Annual Trading Program
40 C.F.R. Part 97, Subpart BBBB	TR NO _x Ozone Season Trading Program
40 C.F.R. Part 97, Subpart CCCCC	TR SO ₂ Group 1 Trading Program

State Only:

45CSR4	To Prevent And Control The Discharge Of Air Pollutants Into The Open Air Which Causes Or Contributes To An Objectionable Odor Or Odors
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Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R33-3938-2017-4A	5/14/13	Effective Dates: 1/1/2013 to 12/31/2017

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

- ❖ This is a renewal of the Title V permit which was issued on May 12, 2009, Administratively Amended on June 14, 2012 and again on December 12, 2012. Changes to the most recent version of the Title V Permit include the following:

1) Title V Boilerplate changes

- Condition 3.1.3. – The words “owner, or operator” were added in the second sentence and 40 C.F.R. 61 was revised to 40 C.F.R. §61.145(b) in the citation of authority.
- Condition 3.3.1. – Subsection “d” was added to this condition. Also section 14 of WV Code §§22-5-4 (a) was added in the citation of authority.
- Conditions 3.4.3. and 3.4.5. - These conditions were revised to require electronic submittal of the annual certification to USEPA. The certification shall now only be submitted to the USEPA by e-mail. Also the USEPA address and office name were updated in condition 3.4.3.
- Conditions 3.4.6. - The words “on or before” were added in front of “March 15” in the first sentence.

2) Facility Information

- The facility telephone number was updated on page one.

3) Section 1.0 changes:

- Added the two diesel engine fire pumps to the “Emission Units” table. These engines are subject to 40 CFR 63 Subpart ZZZZ. (see discussion below)
- Added Tanks 33, 34, 35, and 36 to the “Emission Units” table. Tanks 33 -35 were existing tanks not previously included. Tank 36 was added in 2011. These tanks are not subject to any applicable requirements.

4) Section 3.0 changes:

- Condition 3.1.5. – This condition was previously “Reserved” and has been replaced with the subsequent condition. Likewise each condition after it has been renumbered.
- Condition 3.1.9. – The requirement to comply with the standard requirements set forth in the Transport Rule (TR) NOx Annual Trading Program has been added in this condition. The requirements of the Transport Rule have been added in Appendix D
- Condition 3.1.10. – The requirement to comply with the standard requirements set forth in the Transport Rule (TR) NOx Ozone Season Trading Program has been added in this condition. The requirements of the Transport Rule have been added in Appendix D
- Condition 3.1.11. – The requirement to comply with the standard requirements set forth in the Transport Rule (TR) SO2 Group 1 Trading Program has been added in this condition. The requirements of the Transport Rule have been added in Appendix D
- Condition 3.1.13. – This condition was previously “Reserved” and now contains language for 40 CFR 63 Subpart UUUUU compliance. See discussion below.

- Conditions 3.1.14., 3.1.15., and 3.1.16. – These conditions contained requirements for the CAIR Trading Program. Since CAIR has been replaced with the Transport Rule trading program, these conditions have been deleted from the permit.
- Condition 3.5.2. – The following revisions have been made to the permit shield for non-applicable requirements:
 - 45CSR1 has been repealed and therefore removed from this section.
 - The facility has two emergency fire pumps driven by diesel engines subject to 40 C.F.R. 63 Subpart ZZZZ. Therefore Subpart ZZZZ has been removed from this condition.
 - The language for 45CSR 5, 7, and 17 has been revised to better describe the reasons why these rules are not applicable to the facility.
- 5) **Section 4.0 changes:**
 - Condition 4.3.1. – Updated the most recent test date and results.
 - Condition 4.4.4. – Corrected “conditions 3.4.1. and 3.4.2.” to “conditions 3.3.1. and 3.3.2.”
 - Condition 4.5.5. a.– Added “(Acid Rain Permit is included in Appendix B).”
 - Condition 4.5.6.a. – Corrected “condition 3.5.6.” to “condition 3.4.6.”
 - Condition 4.5.6.b. – Corrected “condition 3.5.8.” to “condition 3.4.8.”
- 6) **Section 6.0:** This section was added to the permit for the requirements applicable to the diesel engine fire pumps.
- 7) **APPENDIX B:** This Appendix was previously “Reserved.” It has been determined that the requirements from the Acid Rain Permit or the Acid Rain Permit itself must be included in the Title V permit. Therefore the Acid Rain Permit has been added in Appendix B.
- 8) **APPENDIX D:** As discussed in Item 4 above (see Conditions 3.1.9., 10., 11., 13., 14., and 15), the CAIR requirements have been replaced with the Transport Rule (TR) requirements in Section 3 of the permit. Likewise, the CAIR Application in Appendix D has been replaced with the TR requirements.
- 9) **APPENDIX E:** This appendix contained a WV compliance order pertaining to the Clean Air Mercury Rule (CAMR). CAMR has been repealed and therefore the compliance order is obsolete. Hence, Appendix E has been deleted
- ❖ **40 CFR 63, Subpart UUUUU – *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units (EGU)***

The Philip Sporn Plant boilers (Units 1–4) each commenced construction prior to May 3, 2011 and each one is therefore defined as an existing electric utility steam generating unit (EGU). They are subject to the requirements of Subpart UUUUU which establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from coal and oil-fired EGUs. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations. Pursuant to 40 CFR §63.9984(b) an existing EGU must comply with this subpart no later than April 16,

2015. A forty-five (45) day compliance extension was requested and granted which extended the compliance date to June 1, 2015.

Due to the cost prohibitive nature of equipping the facility with environmental control in order to be in compliance with Subpart UUUUU, Appalachian Power Company had plans to permanently shut down the Philip Sporn Plant no later than June 1, 2015 and subsequently retire and decommission the facility. The facility was shut down prior to June 1, 2015. However, due to an order issued by the Public Service Commission of West Virginia (PSC) the permanent retirement and decommissioning of the plant has been put on hold pending a PSC review.

Condition 3.1.13. has been added to the permit which prohibits the operation of the Units 1, 2, 3, or 4 without being in compliance with Subpart UUUUU upon start-up.

❖ **40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

Philip Sporn Plant's emergency fire pump engines (*Pump Engine 1 and Pump Engine 2*) are existing stationary compression ignition (CI) RICE less than 500 HP located at a major source of HAP emissions and therefore subject to Subpart ZZZZ. These requirements have been included in Section 6.0 of the permit

- ❖ **40 CFR Part 64** – This is a 2nd renewal. Since CAM was addressed in the first renewal and there were no modifications to the facility that would have triggered a CAM review subsequent to the first renewal, a CAM evaluation was not conducted.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. *45CSR5 – To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations and Coal Refuse Disposal Areas:* The coal handling operations are regulated by 45CSR2 and therefore are exempt in accordance with 45CSR§§5-2.4.b. & 2.14.
- b. *45CSR7 – To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations:* The facility is regulated by 45CSR2 and therefore exempt in accordance with 45CSR§7-10.1
- c. *45CSR17 - To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter:* The facility is regulated by 45CSR2 and therefore exempt in accordance with 45CSR§17-6.1.
- d. *40 C.F.R. 60 Subpart D – Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971:* The Philip Sporn fossil-fuel-fired steam generators were installed prior to August 17, 1971 and have not undergone a "modification" as defined in 40 C.F.R. 60.
- e. *40 C.F.R. 60 Subpart Da – Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978:* The Philip Sporn electric utility steam generating units were installed prior to September 18, 1978 and have not undergone a "modification" as defined in 40 C.F.R. 60.

- f. 40 C.F.R. 60 Subpart K – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973 and Prior to May 19, 1978*: The facility does not include storage vessels that are used to store petroleum liquids (as defined in 40 C.F.R. § 60.111(b)) and that have a storage capacity greater than 40,000 gallons for which construction, reconstruction or modification was commenced after June 11, 1973 and prior to May 19, 1978.
- g. 40 C.F.R. 60 Subpart Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978 and Prior to July 23, 1984*: The facility does not include storage vessels that are used to store petroleum liquids (as defined in 40 C.F.R. § 60.111(b)) and that have a storage capacity greater than 40,000 gallons for which construction, reconstruction or modification was commenced after May 18, 1978 and prior to July 23, 1984.
- h. 40 C.F.R. 60 Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*: The facility storage vessels that are potentially affected by this rule are exempted because they contain liquids with a maximum true vapor pressure of less than 3.5 kPa, have a storage capacity of less than 75 cubic meters, or have not commenced construction, reconstruction or modification after July 23, 1984.
- i. 40 C.F.R. 60 Subpart Y – *Standards of Performance for Coal Preparation Plants*: The Philip Sporn coal processing and conveying equipment were installed prior to October 24, 1974 and have not undergone a “modification” as defined in 40 C.F.R. 60.
- j. 40 C.F.R. 63 Subpart Q – *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers*: The facility does not include industrial process cooling towers that have operated with chromium-based water treatment chemicals on or after September 8, 1994.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: September 11, 2015
Ending Date: October 13, 2015

Point of Contact

All written comments should be addressed to the following individual and office:

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West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1215 • Fax: 304/926-0478
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Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.